



**A Visual Encyclopedia for the Arts,
Sciences and Humanities**

Alberta
EDUCATION



SIGHTLINES

**A Visual Encyclopedia for the Arts,
Sciences and Humanities**

April, 1987
Alberta Education

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Alberta Education Cataloguing in Publication Data

Sightlines : a visual encyclopedia for the arts, sciences and humanities.

The Laserdisc, **Sightlines** is a joint project of the Media and Technology Branch and the Curriculum Branch of Alberta Education.

ISBN 0-920794-64-5

1. Arts -- Study and teaching (Secondary) -- Alberta -- Audio-visual aids -- Catalogs.
2. Humanities -- Study and teaching (Secondary) -- Alberta -- Audio-visual aids -- Catalogs.
3. Science -- Study and teaching (Secondary) -- Alberta -- Audio-visual aids -- Catalogs.
4. Teaching -- Aids and devices. I. Alberta. Alberta Education.

NX313.5575 1987 700.7

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INTRODUCTION

PLEASE NOTE: This mini catalogue is an overview of the laserdisc. A detailed catalogue will be available in the fall of 1987.

LASERDISC TECHNOLOGY

Modern laserdisc technology adds an extraordinary new visual dimension to teaching and learning. A derivation of television and laser storage technology, the laserdisc is capable of storing up to 54,000 individual images per side, any one of which may be located in a matter of seconds. It can store images that were originally in any media format, including running segments from film or videotape.

Resembling a metallic version of an audio long-playing record, the laserdisc is a permanent audio/video storage medium, capable of reproducing full stereo, combined with images of the highest possible video quality. Instead of stereo, two separate audio tracks may be created. These may be in two different languages or at two levels of instruction.

A laser beam from the player is used to retrieve the image data, which are then manipulated and transmitted to a television monitor. There is no physical contact with the disc surface, so stored information cannot deteriorate. The permanence of the data is assured through the use of a surface layer of clear plastic, making this medium one of the most compact, permanent, high quality storage media available today.

The physical nature of the disc allows rapid access to the images, or running segments, as often as desired, and in any order. Since the images are stored in one compact medium, there is no need to handle innumerable slide trays, films, etc.

Laserdiscs represent the state of the art in audio/video storage and retrieval technology, and are the best way, at present, to store large audio-visual data bases at reasonable costs.

SIGHTLINES

Sightlines is a video laserdisc produced by Alberta Education as a joint project of the Media and Technology Branch and the Curriculum Branch. After extensive research into laserdisc technology, the Media and Technology Branch recommended that Alberta Education produce a disc which would serve as an encyclopedia of visuals for the Arts, Sciences and Humanities.

Sightlines has been approved as a basic learning resource for all junior and senior high school art courses. As a visual data base, **Sightlines** provides a wealth of information relevant to various educational curricula, depending on the objectives and needs of the user. It can be used as the sole component in a presentation, or as a complement or supplement to other media.

HOW TO ORDER

Limited copies of this laserdisc are available to educators/educational institutions within Alberta and the Northwest Territories. To order please contact:

Order Desk
Learning Resources Distributing Centre
12360 - 142 Street
Edmonton, Alberta
T5L 4X9
Telephone: (403) 427-2767

PLEASE NOTE

1. All purchases must have a duly authorized purchase order.
2. Images may not be reproduced without copyright clearance from the image source. Alberta Education cannot provide copyright clearance.

ORGANIZATION

Side one of the disc contains just over 26,000 slides, grouped under the following headings:

I. ARTWORKS

- (i) World Art
- (ii) Canadian Art
- (iii) Alberta Art
- (iv) Student Art

II. THEMES FOR STUDY AND MOTIVATION

- (i) Earth and Earth Sciences
- (ii) Flora and Fauna
- (iii) People and the Manufactured Environment

III. PHOTOGRAPHIC PROCESSES

Side two contains two videos, a slide/tape presentation and a 16mm film:

- I. DANCER VIDEO (videotape)
- II. SALMON VIDEO (videotape)
- III. ON WALKING IN DECEMBER (slide/tape)
- IV. WAYS OF SEEING - "REPRODUCTIONS" (16mm film)

Within each section, material is arranged first according to the distributor, then in alphabetical order according to the artist's name, location and/or time period. For example, in (i) World Art, slides from Art Resource, Inc., (frames #2451 to #7478) are followed by slides from Sandak, Inc., (frames #7479 to #11991) and then by slides from General Sources (frames #11992 to #12933).

In the actual production of the disc it was necessary to keep horizontally-mounted and vertically-mounted slides in groups, consequently there are occasional breaks in the alphabetical sequencing of artists. Also, since it is possible that some works fall into more than one category, users should check related categories when seeking a specific name or work. Some sets of materials have, however, been grouped for easy reference.

Chapters 3, 4, 10, 11, 15 and 19 on the disc provide specific organizational information.

SUMMARY OF CONTENT

FRAME	CHAPTER	DESCRIPTION
		SIDE ONE
2 331	1	Title - Sightlines Credits
2431 2432 2440 2441	2	Index Instructions Colour bar Portrait slide
2442	3	Organization - Overview
2447	4	Artworks - Overview
2451	5	World Art (Art Resource, Inc.)
7479	6	World Art (Sancak, Inc.)
11992	7	World Art (General Sources)
12934	8	Canadian Art
15434	9	Alberta Art Student Art
18258	10	Themes for Study and Motivation - Overview
18260	11	Earth and Earth Sciences - Overview
18262	12	Geography
18726	13	Geology
18954	14	Landforms
19219	15	Flora and Fauna - Overview
19221	16	Art in the Natural World
19381	17	Flora and Fauna of Alberta
20140	18	Flora and Fauna - General

FRAME	CHAPTER	DESCRIPTION
21147	19	People and the Manufactured Environment – Overview
21150	20	Activities
21150	21	Cultures
22181	22	Faces
22406	23	History
22976	24	Buildings
23382	25	Machines
23577	26	Landscapes – Urban and Rural
23908	27	Imaginative Perspectives
24516	28	Clothing
24550	29	Utensils and Useful Objects
24668	30	Roads, Fences, Service Structures
24737	31	Space – Overview
24739	32	Outer Space
25384	33	Microscopic Space
25971	34	Molecular Models
25994	35	Photographic Processes
26381	-	Voyager Spacecraft at Uranus

SIDE TWO

Time in Minutes

00-04	1	Dancer Video
04-05	2	Salmon Video
06-17	3	On Walking in December
18-49	4	Ways of Seeing – "Reproductions" (BBC Film)

LASERDISC HARDWARE

CHOOSING EQUIPMENT

The Laserdisc Player

Laserdiscs (video) have been standardized in two sizes, 12 inch and 8 inch. While there are some players that can accommodate CD audio discs as well as the 8 inch and 12 inch sizes, the cost of one of these units is often equivalent to or greater than the cost of separate CD and laserdisc players. The advantage of having separate players is that they may be used at the same time, as required.

Depending upon the design of the equipment, laserdisc players may be classed as "consumer" or "industrial", and graded according to the "levels" at which they operate. Players are considered to be "level I" or "level II" depending upon whether the player contains a microprocessor. Also, there are significant differences in pricing, the level II player being the most expensive. Standard players will play all laserdiscs, but level II players allow the laserdisc designer to incorporate special commands onto the laserdisc. In this way, the user may interact with the player by answering multiple choice questions via the remote control, and the player will respond by accessing certain portions of the disc according to the user's choice. Level II players are specialized players, and this is reflected in the price. They are primarily used for personal interaction.

Both level I and level II players may be connected to a computer (if they have computer ports), producing a system known as level III. Players may have a port consisting of an 8-pin connector and/or an RS-232 connector. Level III systems can be very effective in that they allow interaction between the user, the computer, and the laserdisc. The APPLE, the IBM, and other computer systems may, with the laserdisc, be used as information acquisition, storage, manipulation, and dissemination systems of incredible power.

Purchasers should note that some players require a remote control to access all functions, and these remote controls are not necessarily included in the price of the player. Purchasers should also consider the costs associated with each type of player, and the intended use. It is, therefore, recommended that purchasers contact the player manufacturers or their representatives for the latest information on player models, their functions and capabilities, before making a final selection. At the time of publication of this catalogue the cost of a basic level I player was between \$750.00 and \$1,200.00.

The Television/Monitor

The image produced by a laserdisc is only as good as the television or monitor on which it is displayed. Although any television set may be used, it is recommended that the laserdisc player be connected to a monitor, since standard television sets do not usually give as high an image resolution as a monitor. Monitors may usually be identified by having separate video and audio input connectors, as compared to a television which may have cable and/or RF connectors.

The size of the monitor or television used should depend upon the size of the audience. Classrooms of approximately 30 people should use a 26 inch monitor for the image to be clearly visible to all. For individualized or small group use, monitors 12 inches or less in size are quite sufficient.

Television projectors can also be connected to the laserdisc player. Although the quality of the image will depend upon the quality of the projector and the conditions under which it is operated, the television projector can produce some excellent images. Always ensure that the equipment is operating properly and that the television or monitor has been adjusted for brightness, contrast, colour, and hue. (The Sightlines laserdisc contains colour bars [frame 2440] and a portrait [frame 2441] to help in the adjustment of these controls.)

Images may be enhanced by adjustments to the television or monitor. Although most images should be viewed after appropriate settings have been made -- with the colour bars and portrait -- some images will yield more information if adjustments are made to the contrast, brightness, or picture controls.

The Interface

Several interfaces that allow for the connection of the laserdisc player and monitor to a computer are currently available on the market. When purchasing an interface, it is important to know the make and model of the computer to be used, the make and model of the laserdisc player, and the computer software that will be used with this combination. It is also essential to ascertain if the player has the right type of computer ports.

Because interfaces vary tremendously in cost, and in computer-laserdisc combinations, the novice would be wise to seek professional assistance before purchasing.

PROBLEMS WITH LASERDISCS

1. Warping

Laserdiscs may become warped if they are left close to heat sources or in an angled position and consequently they may not play properly. Warps may be corrected by placing the disc between two smooth flat surfaces and weighting with a heavy object (or a stack of books).

2. Jamming or Skipping

Jamming or skipping can occur if the information on the laserdisc has been damaged. This frequently happened in the early days of laserdisc production, but is not so common now. If jamming occurs, the disc should be returned to the place of purchase. Discs should be run immediately after purchase to ensure they function properly. (Jamming should not be confused with picture or chapter stops where the disc automatically stops at pre-programmed points on the disc.)

3. Cracked Laserdiscs

Laserdiscs may crack if they are mistreated. A cracked disc spinning at up to 1800 rpm when in use, can easily disintegrate and damage the player. In such instances, the laserdisc should be destroyed.

Connections

To ensure that all equipment will function as it is supposed to, proper connections must be made. Consult your equipment manuals for assistance in this matter. Most often, equipment "failures" are simply the result of improper connections or choice of functions.

OPERATING EQUIPMENT

Movement and Storage of Equipment

The laserdisc player should be treated in the same manner as any other fine instrument. It will not take kindly to sudden jolts, especially when the player is in operation. At best, the player may skip frames or running segments; at worst, the player may be damaged.

To avoid damage, the player should be shipped with the shipping screw tightly in place. This screw must be removed when the player is to be used. It is suggested that if the player is to be placed on a cart for movement about the building, it be placed on a panel of hardboard set on top of a slab of foam rubber at least 1/2 inch thick. This should prevent damage to the player when it is being moved about for casual use.

The player should be stored for long periods, with the shipping screw in place, in a room at normal temperature and humidity. Consult the player manual for more detailed information.

Laserdiscs

1. Handling Laserdiscs

Although laserdiscs are much more durable than audio discs such as long-playing records, they should be handled in the same manner. It is advisable to pick up a disc by placing the thumb at the edge with the index finger in the centre hole. This permits secure handling and avoids leaving fingerprints on the surface.

2. Storage of Laserdiscs

Discs should be stored in the same manner and with the same care as long-playing records - in an upright position at room temperature or slightly cooler. Care should be taken not to leave discs exposed to sunlight (heating) or close to hot areas. Discs should not be left in laserdisc players.

3. Cleaning of Laserdiscs

A damp cloth, used gently and with a circular motion, will remove fingerprints or other dirt from a disc's surface.

LASERDISC INFORMATION SOURCES

PLEASE NOTE

The sources identified below were provided through the courtesy of various individuals, agencies and institutions. The videodisc titles available from these sources have not been evaluated by Alberta Education and their listing is not to be construed as an explicit or implicit departmental approval for use. They are provided solely as a service to assist local jurisdictions to identify potentially useful learning resources. The responsibility to evaluate these resources prior to selection rests with the local jurisdiction.

SUGGESTED CATALOGUE SOURCES

1. Educational Laserdisc Directory
Joanne Gardner, M. Ed.; Alan
Hofmeister, Ph. D.
Systems Impact, Inc.
4400 MacArthur Boulevard NW
Suite 203
Washington, D.C., U.S.A.
20007
(202) 342-9369
2. Videodiscs for Education: A Directory
Richard A. Pollak
Director of Special Projects
MECC (Minnesota Educational
Computing Consortium)
3490 Lexington Avenue North
St. Paul, Minnesota, U.S.A.
55126
3. Laser World
533 Second Street
San Francisco, California, U.S.A.
94107
(415) 957-1163
4. Pioneer Video Inc.
200 West Grand Avenue
Montvale, New Jersey, U.S.A.
07645
(201) 573-1122
5. Starship Audio Industries
605 Utterback Store Road
Great Falls, Virginia, U.S.A.
22066
(703) 430-8692
6. The Instant Replay
479 Winter Street
Waltham, MA, U.S.A.
02154-1216
(800) THE-INST (Canadian Direct Line to
The Instant Replay)

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FOR FURTHER READING

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ACKNOWLEDGEMENTS

IMAGE SOURCES

Major Art Sources

- Art Resource, Inc.
- Sandak, Inc.

Other Image Sources

- National Film Board of Canada (McIntyre Educational Media)
- National Gallery of Canada
- Alberta Art Foundation
- Art Gallery of Ontario
- Rod E. McConnell photo collection
- Art Gallery of Hamilton
- Musee du Quebec
- Karvonen Films
- Public Affairs Bureau, Audio Visual Services, Government of Alberta
- University of Calgary
- Landsat
- Alberta Education (Alberta School Broadcasts)
- Glenbow Foundation
- Ernest Brown collection - Provincial Museum and Archives, Alberta
- Arman Earl photo collection
- Edmonton Art Gallery
- Sharon Busby photo collection
- Woltjen/Udell Gallery, Edmonton
- Douglas Cardinal Architect, Ltd.
- Canadian Eskimo Arts Council
- Aramco World Magazine
- Gallery Moos, Toronto
- Chuck Evans photo collection
- Cymar Films
- Richard Sherburne photo collection
- Dr. R. Whitehouse photo collection
- George Braybrook photo collection
- David Jordan photo collection
- Jet Propulsion Laboratory
- National Aeronautics and Space Administration
- (Plus numerous images from the collections of individual artists)

Films and Special Productions

- The British Broadcasting Corporation
- Gastown Productions Ltd.

ACKNOWLEDGEMENTS

PRODUCED BY

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Post-Production

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3M, St. Paul, Minnesota